REMARKS

Claims 1 through 21 are pending in the application.

Claim 1 has been amended to clarify that in advantageous embodiments the white pigment consists essentially of rutile-type titanium dioxide.

Claim 1 has also been amended to recite that in beneficial embodiments the films of the invention exhbit a light transmittance of up to 85%. Support for this amendment can be found in the Application-as-filed, for example on Page 16, lines 14 through 16.

Claim 20 has been amended to substitute the trademarked name "Suden Blue 2" with its chemical name, 1-4-bis-(butylamino)-anthraquinone as defined by C.I. 61554.

Applicants respectfully submit that this response does not raise new issues, but merely places the above-referenced application either in condition for allowance, or alternatively, in better form for appeal. Reexamination and reconsideration of this application, withdrawal of all rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the remarks which follow.

Claim Objections

Claims 1, 2 and 10 stand objected.

Claim 1 has been amended to correct a typographical error in the term "rutile."

The nonmenclature within Claim 10 has been objected to. Applicants respectfully submit that the Greek symbol "λ" within Claim 10 is well understood by one skilled in the art.

The Office Action indicates that Claim 2 contains the term "Sudan Blue 2." Applicants respectfully submit that Claim 20, rather than Claim 2, includes the term "Sudan Blue 2." Although Sudan Blue 2 is a term well known to one skilled in the art, solely to advance prosecution of the case, the term has been deleted from Claim 20, and a generic description inserted therefore.

Accordingly, Applicants request withdrawal of the outstanding objections.

Claim Status in Light of the Cited Art

Claims 1 through 6, 13 and 19 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of United States Patent No. 6,521,351 ("US 351") to Murschall et al. in view of United States Patent No. 6,627,695 ("US 695") to Murschall et al. In the alternative, Claims 1 through 6, 13 and 19 stand rejected over US 351 in view of US 695.

Claims 1 through 4, 13 and 19 through 21 stand rejected over United States Patent No. 6,436,219 ("US 219") to Francis in view of EP 0 942 031 A ("EP 031) to Miki.

Claims 5 through 7, 11 and 12 stand rejected over US 219 in view of EP 031 and further in view of United States Patent No. 4,415,684 ("US 684") to Lai et al. Claims 8 through 10 stand rejected over US 219 in view of EP

031 and further in view of US 684 and United States Patent No. 4,033,936 ("US 936") to Bollert et al.

Statement of Common Ownership

The instant application and United States Patent No. 6,521,351 were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same organization, i.e. Mitsubishi Polyester Film GmbH. Accordingly, Applicants respectfully submit that United States Patent No. 6,521,351 should be removed as prior art.

The Claimed Invention is Patentable in Light of the Cited References

It may be useful to consider the invention as recited in the claims before addressing the merits of the rejection. The claims are directed to white, biaxially oriented film exhibiting a whiteness of 90 % or more. In advantageous embodiments, the white films of the invention include white pigment consisting essentially of rutile-type titanium dioxide, at least one optical brightener and at least one soluble blue dye. The films of the invention beneficially exhibit a light transmittance of up to 85%.

The films of the invention further include at least one other functionality. Exemplary functionalities include flame retardant and/or UV stabilizers and/or coatings and/or corona treatment, as recited in Claim 5. In further beneficial embodiments, the crystallizable thermoplastic has a polyethylene glycol content of 1 % by weight or more and the film is thermoformable, as recited in Claim 21.

Regardless of its status as prior art, Claims 1 through 6, 13 and 19 are patentable in light of US 351. US 351 is directed to films rendered white by the inclusion of barium sulfate. (Col. 2, lines 4 – 9). US 351 provides an extensive

discussion of appropriate barium sulfate types, amounts and particle sizes. (Col. 4, lines 39 – 54). The resulting films of US 351 are noted to provide low luminous transmittance, preferably less than 25 %. (Col. 1, lines 50 – 54 and Col. 5, lines 46 - 50).

US 351 does not teach or suggest white, biaxially oriented films formed from white pigment consisting essentially of rutile-type titanium dioxide, as recited in the claimed invention. In fact, US 351 teaches away from such films, by requiring the incorporation of barium sulfate. US 351 further does not teach or suggest films exhbiting a light transmittance of up to 85%, as further recited within the claimed invention.

US 351 also does not teach or suggest films advantageously including flame retardant, as recited in Claims 5 and 8 through 10. Nor does US 351 teach or suggest the beneficial use of hydrolysis stabilizer, as recited in Claims 11 and 12.

And US 351 also does not teach or suggest the advantageous thermoformable films of the invention, including 1 % by weight or more of polyethylene glycol, as recited in Claim 21.

US 695 does not cure the deficiencies within US 351. US 695 is directed to yet another means by which to form white polyester films, i.e. the incorporation of cyclic olefin copolymer ("COC"). (Col. 3, lines 24 – 30). US 695 provides an extensive discussion of the amounts and types of COC suitable for incorporation. (Col. 3, lines 24 – 30; Col. 3, lines 51 – 53; Col. 8, line 13 – Col. 10, line 44). US 695 briefly notes that "further" pigmentation may be included within the films to "improve" the whiteness thereof. (Col. 11, lines 15 – 20). US 695 describes the film as having "high opacity," preferably above 65 %. (Col. 12, lines 23 – 29).

Consequently, US 695 similarly does not teach or suggest films formed from white pigment consisting essentially of rutile-type titanium dioxide, as recited in the claimed invention. US 695 similarly teaches away from such films by requiring the incorporation of COC. US 695 further does not teach or suggest the recited light transmittance of up to 85%.

US 695 also does not teach or suggest films advantageously including flame retardant, as recited in Claims 5 and 8 through 10. Nor does US 695 teach or suggest the beneficial use of hydrolysis stabilizer, as recited in Claims 11 and 12. US 695 also does not teach or suggest the advantageous thermoformable films of the invention, including 1 % by weight or more of polyethylene glycol, as recited in Claim 21.

There would have been no motivation to have combined US 351 and US 695. Applicants respectfully submit that merely because the references can be combined is not enough, there must still be a suggestion. MPEP 2143.01 (section citing Mills). Applicants respectfully submit that the Office Action is indulging in impermissible hindsight by merely picking and choosing elements from the prior art while using the instant specification as the guide for that selection process.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. US 351 is directed to white films formed using barium sulphate. US 695 is directed to white films formed using COC. Consequently, even if combined, the recited films including white pigment consisting essentially of rutile-type titanium dioxide would not result. And such films exhbiting a light transmittance of up to 85% most certainly would not result.

Accordingly, Applicants respectfully submit that Claims 1 through 6, 13 and 19 are patentable in light of US 351 and US 695, considered either alone or in combination.

US 219 is directed to multilayered photographic substrates which include a grey or preferably black layer to provide adequate opacity. (Col. 3, lines 30 – 33 and Col. 3, lines 48 – 49). The grey or black layer purportedly improves upon white films, which are said to allow "some light" to pass through the film. (Col. 1, lines 49 – 53). The remaining layer of US 219 may include a number of inorganic or organic fillers, including barium sulfate or incompatable resins. (Col. 4, lines 26 – 35 and Col. 5, line 50 – Col. 6, line 18). US 219 further discloses the preferable inclusion of anatase-type titanium dioxide. (Col. 4, lines 50 – 53).

Accordingly, US 219 does not teach or suggest the recited films exhbiting a light transmittance of up to 85%. In fact, US 219 strongly teaches away from such films, whose purported shortcomings as photographic substrates US 219 seeks to overcome.

US 219 also does not teach or suggest the recited white films of the invention, much less such films formed from white pigment consisting essentially of rutile-type titanium dioxide. US 219 teaches away from the claimed rutile-type titanium dioxide by noting the preferable inclusion of anatase-type titanium dioxide within the non-black layers of its films.

US 219 also does not teach or suggest films advantageously including flame retardant, as recited in Claims 5 and 8 through 10. Nor does US 219 teach or suggest the beneficial use of hydrolysis stabilizer, as recited in Claims 11 and 12. US 219 further does not teach or suggest the advantageous thermoformable films of the invention, including 1 % by weight or more of polyethylene glycol, as recited in Claim 21.

EP 031 does not cure the deficiencies within US 219. EP 031 is directed to white films with low lead content, for use in prepaid cards. (Paragraphs 0004 and 0028). The color tone of the surface of such prepaid cards is said to be "important." (Paragraph 0022) EP 031 discloses a laundry list of appropriate white pigments, including barium sulfate, calcium carbonate and the like. (Paragraph 0025). EP 031 expressly notes that rutile-type titanium dioxide has a more yellowish color as compared to anatase-type titanium dioxide, and that anatase-type titanium dioxide is thus preferred. (Paragraph 0046).

Accordingly, EP 031 does not teach or suggest films formed from the recited white pigment consisting essentially of rutile-type titanium dioxide that exhibit a whiteness of 90 % or more. In fact, EP 031 teaches away from such films by noting that rutile-type titanium dioxide purported imparts a yellow cast to films. EP 031 also does not teach or suggest the recited films exhbiting a light transmittance of up to 85%.

EP 031 further does not teach or suggest films advantageously including flame retardant, as recited in Claims 5 and 8 through 10. Nor does EP 031 teach or suggest the beneficial use of hydrolysis stabilizer, as recited in Claims 11 and 12. EP 031 also does not teach or suggest the advantageous thermoformable films of the invention, including 1 % by weight or more of polyethylene glycol, as recited in Claim 21.

There similarly would have been no motivation to have combined US 219 and EP 031. Applicants respectfully reiterate that merely because the references can be combined is not enough, there must still be a suggestion. MPEP 2143.01 (section citing Mills).

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. US 219 is directed to photographic substrates incorporating a grey or black layer. EP 031 is directed to low lead films that preferably include anatase-type titanium dioxide. Consequently, even if combined, the recited white films exhbiting a light transmittance of up to 85% and a whiteness of 90% or more would not result, and most certainly not such films incorporating the recited rutile-type titanium dioxide.

Accordingly, Applicants respectfully submit that Claims 1 through 4, 13 and 19 through 21 are patentable in light of US 219 and EP 031, considered either alone or in combination.

US 684 is generally directed to hindered amine UV light stabilizers. (Col. 1, lines 53 – 54). The hindered amines may be incorporated into any "low or high molecular weight materials," including oils and monomers. (Col. 8, lines 13 – 21). The light stabilizers may also be incorporated into a broad list of polymeric substrates, including polyhydrocarbons, polyamides and cellulose ethers. (Col. 3, lines 15 – 24).

Again, there would have been no motivation to have combined US 219, EP 031 and US 684.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. US 219 is directed to photographic substrates incorporating a grey or black layer. EP 031 is directed to low lead films that preferably include anatase-type titanium dioxide to provide optimum whiteness. US 684 is directed to hindered amine UV light stabilizers. Consequently, even if combined, the recited white films exhbiting a light transmittance of up to 85% and a whiteness of 90% or more would not result,

and most certainly not such films incorporating the recited rutile-type titanium dioxide.

Accordingly, Applicants respectfully submit that Claims 5 through 7, 11 and 12 are patentable in light of US 219, EP 031 and US 684, considered either alone or in combination.

US 936 teaches a process for the production of polyesters in which phosphorus compounds, such as carboxyphosphinic acid, are incorporated in the polymer main chain. The reference is completely silent about white polyester films. All that is disclosed is that the flame-retardant polyesters may be processed into filaments, fibers, sheets or shaped articles (col. 1, l. 54/55).

There similarly would have been no motivation to have combined US 219, EP 031, US 684 and US 936.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. As noted above, US 219 is directed to photographic substrates incorporating a grey or black layer. EP 031 is directed to low lead films that preferably include anatase-type titanium dioxide to provide optimum whiteness. US 684 is directed to hindered amine UV light stabilizers. US 936 is directed to polyesters having phosphorus incorporated into the polymer chain. Consequently, even if combined, the recited white films exhibiting a light transmittance of up to 85% and a whiteness of 90% or more would not result, and most certainly not such films incorporating the recited rutile-type titanium dioxide.

Accordingly, Applicants respectfully submit that Claims 8 through 10 are patentable in light of US 219, EP 031, US 684 and US 936, considered either alone or in combination.

Consideration of Previously Submitted Information Disclosure Statement

It is noted that an initialed coy of the PTO Form 1449 that was submitted with Applicants' Information Disclosure Statement filed February 27, 2002 has not been returned to Applicants' representative with the Office Action. Accordingly, it is requested that an initialed copy of the Form 1449 be forwarded to the undersigned with the next communication from the PTO. In order to facilitate review of the references by the Examiner, a copy of the Information Disclosure Statement and the Form 1449 are attached hereto. Copies of the cited references were provided at the time of filing the original Information Disclosure Statement, and, therefore, no additional copies of the references are submitted herewith. Applicants will be pleased to provide additional copies of the references upon the Examiner's request if it proves difficult to locate the original references.

CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 13 and 19 through 21 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional fees are necessary to allow consideration of this paper, the fees are hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office at facsimile number (703) 872-9306 on April 15, 2004.

Claire Wygand

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